



Working Paper No. 514

The Continuing Legacy of John Maynard Keynes

by

L. Randall Wray

The Levy Economics Institute and
University of Missouri–Kansas City

September 2007

This paper is based on the author's introduction to *The General Theory after 70 Years*,
M. Forstater and L. R. Wray, eds., Palgrave Macmillan (forthcoming).

The Levy Economics Institute Working Paper Collection presents research in progress by
Levy Institute scholars and conference participants. The purpose of the series is to
disseminate ideas to and elicit comments from academics and professionals.

The Levy Economics Institute of Bard College, founded in 1986, is a nonprofit,
nonpartisan, independently funded research organization devoted to public service.
Through scholarship and economic research it generates viable, effective public policy
responses to important economic problems that profoundly affect the quality of life in
the United States and abroad.

The Levy Economics Institute
P.O. Box 5000
Annandale-on-Hudson, NY 12504-5000
<http://www.levy.org>

Copyright © The Levy Economics Institute 2007 All rights reserved.

ABSTRACT

This working paper examines the legacy of Keynes's *General Theory of Employment, Interest, and Money* (1936), on the occasion of the 70th anniversary of the publication of Keynes's masterpiece and the 60th anniversary of his death. The paper incorporates some of the latest research by prominent followers of Keynes, presented at the 9th International Post Keynesian Conference in September 2006, and integrates this with other work that has come out of the Keynesian tradition since the 1940s. It is argued that Keynes's contributions still provide important guidance for real-world policy formation.

Keywords: Keynes's Legacy, Keynesian Theory, Keynesian Policy

JEL Classifications: B3, B5, E12

What is the enduring legacy of John Maynard Keynes? Among mainstream economists there isn't much of interest—sticky wages and the (now discredited) notion of fine-tuning through fiscal policy. As Kregel (2007) argues, the most charitable orthodox interpretations argue that, at best, the *General Theory* applies only to the special case of the deflationary conditions of a deep slump. In the modern, globalized economy the mostly unfettered market relegates Keynesian policy to the historical dustbin. It will be clear to readers, however, that there is an alternative perspective. We can still find much relevance in Keynes's writing.

In my view, the central proposition of the *General Theory* can be simply stated as follows: *Entrepreneurs produce what they expect to sell, and there is no reason to presume that the sum of these production decisions is consistent with the full-employment level of output, either in the short run or in the long run.* Moreover, this proposition holds regardless of market structure—even where competition is perfect and wages are flexible. It holds even if expectations are always fulfilled, and in a stable economic environment. In other words, Keynes did not rely on sticky wages, monopoly power, disappointed expectations, or economic instability to explain unemployment. While each of these conditions could certainly make matters worse, he wanted to explain the possibility of equilibrium with unemployment, even under the conditions most favorable to orthodoxy.

Keynes's central proposition draws focus to the entrepreneurial decision: each firm produces what it expects to sell. That decision is based on a comparison between the costs incurred to produce now against the proceeds expected to be received in the future. The implication of beginning analysis with the production decision marks the critical difference between the Keynesian approach and neoclassical economics (which begins with allocations of consumption through time to maximize utility). A decision to produce is simultaneously a decision to employ and to provide incomes to workers. It probably also commits the firm to a stream of payments over some time period. Production will not be undertaken unless the proceeds expected to be received on future dates exceeds by a sufficient margin the costs incurred today and into the future. Both the costs and the revenues accrue in the form of money. If the comparison of estimated costs and expected revenues is deemed unfavorable, production is not undertaken and income is not

generated. There is no reason to believe that the result of all of these individual production decisions will be full employment of labor resources.

Keynes required only three conditions to ensure the possibility of equilibrium with unemployment: historical time, autonomous spending, and existence of a nonproducible store of value. With historical time, the past is more or less known, but cannot be changed; decisions taken today depend on outcomes that depend in part on past decisions, as well as on outcomes expected in the future; and the future cannot be known now. [Harcourt (2007) quotes Robinson on the definition of Post-Keynesian economics: “it applies to an economic theory or method of analysis which takes account of the difference between the future and the past.”] Each of these considerations represents an important deviation from most orthodox analysis. Mistakes cannot be easily eliminated through “recontracting”; hysteresis and cumulative causation are pervasive phenomena; decisions must be taken without the possibility of knowing with certainty what the future might bring. At least a portion of spending depends on expectations of the future rather than on today’s income—allowing individual spending to be less than, equal to, or greater than income. Both income and spending are in monetary terms; income received but not spent means—in the first instance, at least—accumulation of money balances. Returning specifically to the entrepreneurial decision, an alternative to producing is to accumulate (again, at least initially) money balances. When entrepreneurial expectations about revenues from production are low, they will prefer to hold money. As Kregel (2007) explains, Hayek had argued that the market would automatically operate to ensure a quick return to the full-employment level of production because labor would be diverted to produce gold to satisfy the preference for accumulation of money over production of other commodities. Keynes’s response was that gold is not money, rather, money is an asset with “special properties”: nearly zero carrying costs, elasticity of substitution, and elasticity of production. The last characteristic means that when the demand for money rises, labor is not diverted to its production. So long as there is at least one asset that is not produced by labor, it can become a bottomless sink of purchasing power, overturning Say’s Law and subverting any market forces to return the system to full employment.

As mentioned, Keynes did not need to assume that expectations had been disappointed, causing production to temporarily fall below the full-employment level. Indeed, after publication of the *General Theory*, he argued that he could have assumed that expectations are always fulfilled and still he would have obtained the same results. All that is necessary is that entrepreneurs cannot be sure that their expectations *will be* fulfilled. It is the uncertainty that generates a preference for liquid assets and thus, a barrier to achieving full employment. Nor does the outcome require instability. While some of Keynes's best known passages (especially those in Chapter 12) do refer to "whirlwinds of speculation" and other examples of instability, as Kregel (1976) has argued, his favorite explanation of equilibrium with unemployment utilized a static model in which expectations—both short-run and long-run—are held constant, uninfluenced by outcome. Again, firms produce only what they expect to sell at profit, and it is not necessary for them to have been disappointed or to be subject to unstable economic forces in order for the sum of their individual production decisions to leave some labor resources unutilized.

Keynes famously remarked that no one in a neoclassical model would hold money because there could be no value to holding a riskless (hence, low return) asset. This was later confirmed by Hahn, who lamented that there is no room for money in any rigorous orthodox model. Goodhart (2007) insists that the possibility of default is central to any analysis of a money-using economy. As decisions about production made today commit entrepreneurs to payments in the future, there is the possibility that they will not be able to meet contractual terms. However, orthodox models explicitly rule out default, implying all IOUs are risk-free, thereby eliminating any need for the monitoring services provided by financial institutions. Not only is there no room for money in these models, there is also no need for banks or other financial intermediaries. Financial instability is also ruled out, not—as in Keynes—because instability is unnecessary to demonstrate the desired results, but because absence of the possibility of default requires perfect foresight or complete and perfect markets so that all outcomes can be hedged. As Goodhart concludes, these mainstream macro models cannot incorporate the real world features that Keynes included: animal spirits and degree of confidence, market psychology, liquidity preference, or even a consumption function relating spending to income (since

all agents are equally credit worthy). By contrast, the basic Keynesian model is easily extended to account for heterogeneous credit ratings, to allow default to affect expectations, and to include “contagions” and other repercussions set off by default of one large economic entity on its commitments. The best example of such extensions is, of course, the work of the late Hyman Minsky.

Keynes had addressed stability issues when he argued that if wages were flexible, then market forces set off by unemployment would move the economy further from full employment due to effects on aggregate demand, profits, and expectations. This is why he argued that one condition for stability is a degree of wage stickiness in terms of money. (Incredibly, this argument has been misinterpreted to mean that sticky wages cause unemployment—a point almost directly opposite to Keynes’s conclusion.) Minsky and others have carried this further by arguing that if the economy ever were to achieve full employment, this would generate destabilizing forces restoring unemployment. There is, of course, the Marxian/Kaleckian political economy argument that full employment emboldens workers, sparking a capitalist reaction to restore a disciplining reserve army of the unemployed. However, more directly related to Keynes’s analysis is Minsky’s argument that the main instability experienced in a modern capitalist economy is a tendency toward explosive euphoria. High aggregate demand and profits that can be associated with full employment raise expectations and encourage increasingly risky ventures based on commitments of future revenues that will not be realized. A snowball of defaults then leads to a Fisher-type debt deflation and high unemployment unless there are “circuit breakers” that intervene to stop the market forces. The main circuit breakers, according to Minsky, are Big Bank (central bank) intervention as a lender of last resort and countercyclical budget deficits.

Keynes’s impact on postwar policy was at least as great as his impact on theory. Of course, it is questionable whether much of the policy that was called Keynesian really had strong roots in Keynes’s *General Theory*. Still, the influences of Keynes’s work on domestic fiscal and monetary policy, on the international financial system, and on development policy—especially in Latin America—cannot be denied. If we take the central message of the *General Theory* as the proposition that entrepreneurial production decisions cannot be expected to generate equilibrium at full employment, then the

obvious policy response is to use government to try to raise production beyond the level “ground out” by market forces. Unfortunately, “Keynesian” policy was eventually reduced to overly simplistic metaphors such as “pump-priming” and “fine-tuning” that would keep aggregate demand at just the right level to maintain full employment. It is now commonplace to claim that Keynesian policy was tried, but failed.

In practice, postwar policy usually consisted of measures to promote saving and investment. The first was wholly inconsistent with Keynes, based instead on the neoclassical loanable funds view that saving “finances” investment; the second was based on a multiplier view, that, while somewhat consistent with Keynes’s explication of the determination of the equilibrium level of output, relied on overly simplistic views of entrepreneurial expectation formation while ignoring important stability questions. First, there are the Harrod/Domar concerns that unfortunately have been reduced to growth theory’s “knife-edge” problem. The more useful interpretation of what came to be known as growth theory is that there is no reason to believe that the demand (or multiplier) effect of investment will be sufficient to absorb the additional capacity generated by the supply effect of investment. There are a number of related avenues of research—ranging from the Hansen stagnation thesis, to a Keynesian “disproportionalities” argument that such gross policy measures would generate the wrong mix of productive capacity relative to demand, to the Vatter and Walker view that sustaining adequate rates of growth through time would require continuous growth of the government sector relative to growth of the private sector.

Second, attempting to maintain full employment by stimulating private investment would shift the distribution of income toward owners of capital, worsening inequality and thereby lowering the society’s propensity to consume—one of the problems addressed by Keynes in Chapter 24 of the *General Theory*. One of the main areas addressed by Post-Keynesians has been distribution theory and implications of heterogeneous saving rates on distribution. Further, work based on Kalecki’s profit equation shows how higher investment rates generate higher profit rates, and shifts the distribution of income toward entrepreneurs and away from workers. There are also two kinds of sectoral issues raised. A high investment strategy will tend to favor capital-intensive industries, shifting the distribution of income toward higher-paid and unionized

workers. The sectoral balances approach implicitly adopted by Minsky (1963) in his earliest work, and developed in detail by Wynne Godley, carries the Kalecki analysis further by examining the implications for financial balances implied by spending growth. For example, an expansion led by private-sector deficit spending (with firms borrowing to finance investment in excess of internal income flows) implies that the government and/or the external sector will record equivalent surpluses (a government budget surplus and/or a capital account surplus). This then raises sustainability issues, as private debt will grow faster than private sector income.

Third, Minsky's financial instability hypothesis raises related concerns. Over the course of an economic boom that is led by investment spending, private firms stretch liquidity (income flows are leveraged by debt and the ratio of safe assets to liabilities rises) and lead to increasingly fragile financial positions. This happens at both the micro level and at the level of the economy as a whole. According to Minsky's famous exposition, speculative and Ponzi positions replace hedge positions and the economy becomes increasingly vulnerable to any one of several possible triggers that can set off a financial crisis and increase the potential for a Fisher-type debt deflation: an unexpected default that snowballs; rising interest rates (perhaps at the hands of a central bank that fears inflation) or tightening credit terms that close access to credit; and realized profits that are lower than had been expected—which then lowers expectations and investment, leading to even lower profits through the Kalecki relation. Combining the financial fragility hypothesis with the Godley sectoral balances approach, it is apparent that the government budget plays an important role in cooling a boom: rapid growth of income moves the government budget toward balance and even to a surplus, which destroys profits. The mostly unrecognized flip-side to a government sector surplus is a private-sector deficit (holding the foreign balance constant), so “improvement” of government balances must mean, by identity, that nongovernment balances become more precarious. Followers of the work of Minsky and Godley were thus amused by orthodox reactions to the Clinton-era budget surpluses, and their predictions that all federal government debt would be eliminated over the coming decade and a half. It was no surprise that the Clinton surpluses killed the boom and morphed into budget deficits, since the budget automatically moves toward larger deficits in a slump, maintaining profit flows and

strengthening private balance sheets that accumulate net wealth in the form of safe government bonds.

Finally, growth led by investment can have both inflationary and exchange rate implications. Of course, orthodoxy claims that inflation is mostly demand-driven. If expansionary fiscal or monetary policy raises demand above the full-employment level (defined variously as the natural rate or the NAIRU), inflation results. By contrast, Keynes argued that “semi-inflation” could arise long before full employment is reached; he defined as “true inflation” the type of inflation considered by orthodoxy. Keynes’s followers argue that much or even most of the real world experience with inflation occurs in conditions of insufficient aggregate demand. There are a number of explanations, ranging from bottlenecks and other structural problems, to oligopoly pricing of output and of unionized labor. For these reasons, an increase of aggregate demand—especially if induced by rising investment—can be associated with inflation long before full employment is achieved. In addition, an increase of aggregate demand can worsen the trade balance, depreciate the currency, and cause pass-through inflation even in the presence of widespread unemployment (see Bresser 2007). Some emphasize the impact of tight money policy, which can have a perverse effect on inflation as high interest rates raise costs and thus, prices (see Moore 2007 and Brazelton 2007). While in orthodox stories it is excessive government spending (or loose monetary policy) that causes inflation, in the Post-Keynesian view, an increase of demand due to private investment spending might actually be more inflationary than an increase attributed to government spending. In an exposition similar to that used by Kalecki to explain the source of profits, Minsky argued that the aggregate markup of the price of consumption goods is a function of the amount of consumption spending in excess of the wage bill in the consumption sector. Because investment generates a wage bill in the investment sector (most of which will be spent on consumer goods), as investment grows relative to consumption, this increases the markup and the overall price level. Hence, the alternative approach to the explanation of distribution and price determination can explain inflation with unemployment—the stagflation problem that could not be explained by the neoclassical synthesis (see Kregel 2007).

Julio Lopez (2007) highlights the importance of Keynes's approach to analysis of the development process. As Lopez says, Keynesianism dominated Latin American thinking through the 1970s, and is making something of a comeback as the neoliberal Washington Consensus is thrown off. Bresser (2007) sees the failed neoliberal policy that was promulgated over the past two decades as little more than a thinly disguised effort to maintain U.S. hegemony over Latin America. As Lopez explains, Keynesian theory had to be adapted to the Latin American case, where growth was mostly fueled by exports, not by investment. The Latin American Structuralist approach adopted industrial policy that included protection of domestic industries and that favored import substitution. Both Lopez and Bresser reject the orthodox dichotomy of market versus government in favor of a planned and mixed economy. Bresser calls for a new developmentalism that retains some features of structuralism, while recognizing the changed environment created by globalization. Modern capitalism is intensely nationalistic, and development strategy requires state involvement to put firms in a position to compete internationally. Industry in many of the larger developing nations is already mature so protectionism only impedes productivity growth and generates inferior products that cannot compete. Hence, Bresser advocates economies that are open to trade, although capital controls could be required to stabilize exchange rates. A flexible but managed exchange rate is called for to dampen currency appreciation that would make exports uncompetitive. The new developmentalism rejects the notion that low inflation is the overriding goal of policy, and instead advocates policy geared to maintain moderate interest rates. Inflation arises not due to loose monetary policy, but rather to inappropriate indexing of prices and incomes paid by government, to exchange rate crises, and to fiscal imbalance. Bresser has long argued that Brazil's high inflation episode was not caused by budget deficits, but rather that high inflation caused budget deficits; further, he has argued that eliminating indexing of government payments could brake the inflationary spiral. While a sovereign nation does not need to balance its budget, Bresser does call for better management of fiscal policy, including elimination of indexing, use of longer maturity debt, and maintenance of a small outstanding debt stock. Both Bresser and Lopez point the way to formulation of a Keynesian alternative to the neoliberal orthodox reliance on free trade and small government.

Turning to Keynes's approach to monetary policy, several authors have renewed Keynes's call for low interest rates. This is justified for several reasons. Keynes argued for euthanasia of the rentier—the functionless coupon clipper who earns a return without taking risk. Not only does low interest rate policy improve equity (eliminating an unjustified return) and reduce inequality [as Galbraith (2007) cites his father, “people who have money to lend have more money than people who do not have money to lend”], but it also lowers the bar so that—as Keynes put it—average luck and ability are sufficient to ensure a good probability of success. Others justify lower interest rates on the argument that this encourages investment, although there are the caveats raised above about the wisdom of a growth-through-investment strategy. As mentioned, Moore and others argue that interest is a cost, so lower rates allow lower prices, and because interest is a rate that is compounded, a lower interest rate allows slower growth of prices and wages. Keynes did not simply call for cyclically lower rates (for example, in recession to encourage recovery), but rather for permanently lower rates. I would go further than some of Keynes's followers in calling for setting the overnight interbank lending rate near zero and leaving it there forever. In other words, monetary policy should not be used as a countercyclical force. As Brazelton (2007) argues (following Keyserling), the central bank should be used to promote financial stability—imposing quantity controls during a speculative boom, and intervening as lender of last resort in a bust.

There remains some controversy over Keynes's preferred reform of the international monetary system. Davidson has revived and modified Keynes's famous Bancor plan, arguing for a return to fixed exchange rates based on a new international reserve currency, with a reflux mechanism to eliminate any incentive to accumulate international reserves. This would remove the bias inherent in a gold standard—mercantilist nations want to accumulate gold reserves to protect their exchange rates. The modern equivalent finds the major exporters accumulating vast dollar reserves, while using domestic austerity to ensure a continued trade surplus. Hence, Davidson's plan would punish the surplus nations and put in place conditions that would allow the deficit nations to increase exports. Along these lines, Moore (2007 and elsewhere) advocates currency unions and even dollarization by small nations with weak currencies. Eliminating exchange rate movements is believed to promote domestic stability. On the

other hand, Keynes's advocacy of the Bancor plan could be seen as a pragmatic response by the UK to the hegemonic position the United States would enjoy after WWII. In Keynes's previous work, he clearly rejected fixed exchange rates (especially those based on metallic standards). While he did not call for a "free float," he did advocate flexible but managed exchange rates—the position Bresser seems to adopt. Goodhart (1998) also rejects fixed exchange rates and currency unions; he sees the experiment with the Euro as dangerous because it requires that the individual nations give up sovereignty over their currency—a topic to which we will return in a moment. I have argued that floating the currency allows for domestic policy space. Under a fixed exchange rate system, only those nations that manage to accumulate an unassailable international reserve have the freedom to use domestic monetary (interest rate) policy and fiscal policy to achieve full employment—another topic we will turn to below. For this reason, a floating rate system is necessary to provide more domestic policy independence.

Elsewhere (Wray 2006) I have dealt with Keynes's theoretical approach to money, a topic also addressed by Goodhart (1998, 2007) and Kregel (2007). While the textbook "money supply and demand" approach is based on the *General Theory's* Chapters 13 and 15, the more revolutionary ideas of Keynes are contained in Chapter 17 of the *General Theory*, in the *Treatise on Money*, and in his mostly unpublished writings on ancient monies. Keynes closely followed the approach of Innes and Knapp, integrating what has been called a "creditary" (or, credit money) approach and a "chartalist" (or, state money) approach (Wray 2004). As Goodhart (2007) argues, even if there have been examples of a "commodity money" (for example, a full-bodied gold coin, the nominal value of which is determined by the value of its gold content), modern money is a credit money denominated in a state-chosen unit of account. Innes insisted that even the state's own currency is a credit money, not a commodity money or a fiat money. A gold coin is simply a government IOU that happens to be stamped on gold. Only if the government's creditworthiness is called into question does the value of a government's IOU fall to the value of the embodied precious metal. While the nominal value of a coin is determined by the state, the value is not maintained by mere "proclamation" (or, fiat). Rather, as both Kregel (2007) and Goodhart emphasize, the value of government currency is maintained by acceptance in payments that must be made to the state—today, primarily tax

payments. The logical sequence is that the state first imposes a tax, denominated in the state money; it then can emit its currency (an IOU) denominated in that same unit as it spends (and lends); finally, the holders of the state's IOU can retire their tax and other monetary obligations by delivering the state's IOU.

Innes argues that this “reflux” of IOUs back to their issuer is the fundamental law of credit—a creditor (one holding an IOU) must be able to return an IOU to its issuer for credit. In the same manner, one holding a claim on a bank can deliver the bank IOU in payments made to the bank (for example, to pay down a bank loan). Refusal by the issuer to accept the IOU at its nominal value is a default. The position of the sovereign state is different from that of other debtors because it first *imposes* a liability [what Kregel (2007) jokingly refers to as “the original sin of taxation”] on subjects or citizens (whether these are “self-imposed” by the electorate is irrelevant; all that is important is that the individual taxpayer is not free to choose to avoid paying tax liabilities—as Kregel says, neither death nor taxes can be avoided), and then issues “that which is necessary to pay taxes” (“twintopt” in Wray 1998). Only an entity with something like sovereign power is able to ensure acceptability of its IOUs by first imposing liabilities. We return to Goodhart's claim that any theory of a capitalist economy that uses money must allow for heterogeneous credit risk. The state money approach explains why the state's IOUs are special, attributing sovereign power to the state.

This leads to a revised view of the nature of government finance. Because the government spends its IOUs into circulation, it does not need to use income or borrowing in order to spend. When taxes are paid, refluxed government IOUs are “redeemed,” that is, eliminated. When government spending (IOU emissions) exceeds tax payments (redemptions), the nongovernment sector accumulates net claims on government. For a variety of reasons, the nongovernment sector normally wishes to run a positive balance against the government, which allows accumulation of net (or outside) wealth in the form of government IOUs. One of the important reasons is that the financial system uses government IOUs as the reserve for clearing accounts and holding a reserve of them against issued private liabilities. In this sense, private IOUs leverage government IOUs. It is this relation that allows the central bank to implement monetary policy, maintaining positive overnight interest rates by keeping financial institutions “hungry” on the margin

for more reserves. From this perspective, government sales of bonds are not a borrowing operation, but rather are a part of monetary policy management. When the quantity of banking system reserves is too high, banks offer the excess in the overnight interbank lending market; but if there is an aggregate excess, these offers place downward pressure on the overnight rate, triggering a sale of government bonds by the central bank or treasury. (In practice, there is a division of labor such that the central bank operates in the open market to manage interest rates on a day-to-day basis, while the treasury operates in the new issue market to facilitate monetary policy over the longer run. So long as the treasury maintains a more-or-less constant deposit at its central bank, it is helping the central bank to hit its interest rate target by minimizing the reserve effects of fiscal operations. See Wray 1998 and Bell 2000.) When banks are short reserves, bidding in the overnight market drives rates above the central bank target, triggering open market purchases by the central bank or bond redemption by the treasury.

For this reason, the notion of a government budget constraint is rejected. While the government can choose to constrain its spending through balanced budget laws, or rules governing operating procedure, it does not really face a financial constraint. This does not mean that its spending should rise without limit, for it will eventually face real resource constraints. The question is not one of government solvency, but one of the appropriate share of resources that ought to go to government—and hence, the inflation threshold for government spending. Abba Lerner long ago got it correct with his “functional finance” approach to the budget: what matters is whether the budget is at the right level to achieve the public purpose, not whether the sums of revenues and spending happen to be matched over a time span determined by movements of celestial objects.

Some of the papers collected in Forstater and Wray (2007) also invite a revised view of globalization. Many of those following Keynes do not necessarily reject the mainstream view that more freedom to trade across borders results in net benefits. According to Skidelsky (2007), however, Keynes was rather skeptical of the advantages of trade, arguing that it tends to lead to excessive specialization that lowers the quality of life—a sentiment that surely would be shared by the Latin American structuralists, who saw a strong trend toward deteriorating terms of trade for those countries that specialized in primary commodities exports (see Lopez 2007). Still, Bresser (2007) argues that

protectionism for industry today is particularly unwise for all but the very largest nations because production cannot be undertaken on the scale necessary to achieve production efficiency. It has long been recognized that part of the reason for America's phenomenal economic growth in the 19th century was the scale of the market, something that European integration has sought to replicate. Critics of the neoliberal free trade ideology, however, emphasize the negative impacts that opening of economies has had on wages and thus, on living standards of workers in the developed nations. Both Skidelsky (2007) and Galbraith (2007) also mention some negative impacts of orientation toward global markets on Russia and China. High wages in the export centers of China fuel migration of rural workers to the cities, where many end up unemployed. Skidelsky believes Keynes would have advocated greater public infrastructure investment outside the boom areas. According to Skidelsky, Russian President Putin has embraced neoliberalism and sound finance, using a budget surplus to accumulate foreign securities. This makes little sense in a country that operates with a depressed economy well below capacity. Keynesian policy, again, would focus on raising domestic income and increased spending on public infrastructure.

Galbraith (2007) argues that greater wage convergence across countries is not only inevitable, but also even desirable. Immigration, both legal and illegal, will continue so long as wage differentials across developed and developing nations remain wide. Galbraith cleverly argues that the wage differential contributes to high unemployment, as workers from poorer nations abandon the certainty of low wages at home for the chance at high wages in the rich nations. Imposing more labor market flexibility in the rich nations cannot be the solution to unemployment, because there is a nearly infinite supply of low wage labor willing take jobs, even at wages much below those common in the rich nations. Thus, Galbraith updates Keynes's skepticism over the ability of wage flexibility to resolve unemployment problems. Convergence of wages, together with greater demand stimulus in each country, is seen by Galbraith as the only path to full employment—what he terms a Global Keynesian strategy.

While I endorse Galbraith's policy recommendations, I doubt they would generate true full employment—defined either in the Beveridge way (more vacancies than job seekers) or as a job for anyone willing to work. Demand stimulus alone will not ensure

that all who want to work will find jobs in the private sector. As discussed in Skidelsky (2007), Keynes argued that much of the observed unemployment in the 1920s was structural; Minsky updated this observation in the 1960s, arguing that any dynamic capitalist economy will be eliminating the need for some skills while creating new skill requirements at a pace much faster than the gestation period for a worker (perhaps 16 years in the early 20th century, but 25 or 30 years today in technologically advanced nations). For this reason, there would always be a structural mismatch. There are also more nefarious reasons that some are left behind by discriminating employers, such as the lingering effects of the legacy of slavery addressed by Darity (2007). Even at the peak of economic booms, blacks in America experience unemployment rates that are so high that the boom would be called a depression if whites had similar unemployment rates. This is due in part to continuing overt racial discrimination, and also to the legacy of racism as blacks come to the labor market less prepared to compete. For this reason, pump-priming demand stimulus will create bottlenecks for the types of labor desired by the private sector long before unemployment is eliminated for those deemed less desirable. Galbraith calls for administered prices to dampen inflation pressure, a policy that I do not believe is up to the task to deliver full employment with stable wages and prices, even if price control policy is still a good idea. I am skeptical that most of the U.S. joblessness today is due to insufficient aggregate demand—just as Minsky argued about U.S. unemployment in the 1960s and Keynes argued about UK unemployment in the 1920s, a very large part is structural and requires directed employment programs.

Kregel (2007) provides a brief summary of an alternative path to full employment, although it could be seen as a supplement to Galbraith's proposal for Global Keynesianism. Like Kregel, I advocate a government job guarantee—what Minsky and others called an employer of last resort (ELR) program—that offers an infinitely elastic demand for labor at a wage set by government. This wage ideally should be set at the locally determined living wage, hence would vary across countries depending on national living standards. Over time, there could be convergence toward an international ELR wage, in congruence with the policy advocated by Galbraith. However, unlike Galbraith's proposal, ELR would guarantee a job to anyone, regardless of skills, education, gender, race, ethnicity, national origin, and so on. Performance standards would be enforced, so

that only those willing to work would be allowed to participate—this is not meant to be a welfare program, nor to necessarily replace welfare. Neither is it workfare—a punitive program that forces individuals to meet means-tested criteria and then to work for welfare—participation would not be means-tested and it would be purely voluntary. Work would be designed to be productive, providing socially valuable output and services, such as public infrastructure development and maintenance, public services for youth and aged persons, environmental and public space enhancement, and so on. America’s New Deal programs, Argentina’s *Jefes* program, and India’s long-running Maharashtra job guarantee program can serve as useful models for further development of such programs. As Minsky argued in 1965, only a national program of direct job creation can ensure continuous full employment of all those who want to work.

Minsky argued that ELR can achieve full employment without many of the detrimental effects of trying to achieve full employment through aggregate demand stimulus alone. For the reasons discussed above, Minsky advocated a high consumption strategy, rather than a high investment strategy. ELR directly provides income to those who need it most, and most of this income will go to consumption. Full employment is achieved without relying on finance of inherently risky private investment spending, hence, is not necessarily associated with rising financial fragility. While higher consumption associated with full employment will probably raise the expectations of entrepreneurs, stimulating production and investment, there is an automatic stabilizing feature: as the economy expands, ELR employment and government spending decline because workers are drawn out of the program and into the private sector. Hence, the expansion will increase tax revenues even as government spending falls, reducing fiscal stimulus in a countercyclical manner. Further, ELR will not have the same impacts on income distribution that an investment-led expansion would have, nor would it be as inflationary. Minsky argued that because ELR can be used to lower private sector costs (for example, through provision of public infrastructure), it tends to raise both demand and supply, mitigating inflationary pressures.

However, as Kregel (2007) discusses, the most important price stabilizing feature of ELR is the wage anchor. ELR can be analyzed like a commodity buffer stock program—which stabilizes the price of the buffer stock commodity. The ELR wage is

simply a price floor, which by itself cannot pressure wages since it only catches workers who fail to find a higher paying job elsewhere. Some critics have argued that worker behavior will change with ELR in place without the labor disciplining effects of a reserve army of the unemployed. However, ELR provides a reserve army of the *employed* (private employers can always recruit from the pool of employed workers)—a much more effective reserve army as workers remain employed, demonstrating their availability to work while maintaining and even improving skills and training.

Galbraith (2007) briefly notes that immigration raises issues for rich nations implementing ELR programs. If a U.S. ELR program offered jobs to all regardless of immigration status (as it ideally should do), this could encourage more immigration because the ELR wage would almost certainly exceed the wage most workers south of the border could earn at home. The best solution would be to create ELR programs throughout Latin America to resolve the unemployment problems there while simultaneously reducing emigration to the United States. Galbraith's argument that wage differentials could still draw immigrants to the United States is certainly true, but the flow would be much diminished if jobs were available in all nations. Finally, elsewhere Kregel has argued that ELR should be part of a strategy of development because it can be used to upgrade skills, provide needed infrastructure and public services, reduce excessive migration to urban centers (as jobs can be provided wherever people live), and to integrate marginalized populations. Again, the *Jefes* program provides a particularly useful model that generated such benefits. Hence, implementation of ELR can be used to reduce immigration, eliminate unemployment, and further the development process—to eventually close wage and standard of living gaps internationally.

Many of Keynes's followers have focused on policy, strategy, and pragmatic approaches to real world problems. As Lopez (2007) says, Keynes was a *political* economist. Marcuzzo (2007) examines the role played by Keynes in negotiations to protect the interests of Britain. While he may not have been a *successful* negotiator, he was an eloquent persuader. An overriding theme in his work is that the appeal to self-interest as an effective means to achieving the social purpose had to be rejected. What is variously called the managed economy or mixed economy is necessary. Further, he rejected any argument that the economist should avoid ethical and moral questions. As

Marcuzzo (2007) puts it, “His message was to change the environment within which individuals operate so that moral and rational motives become the spring of action of the collective as a whole.” His theoretical approach still provides the basis for a range of policy proposals to solve economic problems and to advance the public interest while providing space to individual initiative necessary for a successful capitalist economy.

REFERENCES

- Bell, Stephanie. 2000. "Do Taxes and Bonds Finance Government Spending?" *Journal of Economic Issues* 34(September): 603–620.
- Bell, Stephanie, and L. Randall Wray. 2003. "Fiscal Impacts on Reserves and the Independence of the Fed." *Journal of Post Keynesian Economics* 25(2): 263–271.
- Brazelton, W. Robert. 2007. "The 1930s and Beyond: The Beginnings of an American Keynesian—Theory, Policy, and Practitioners." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.
- Bresser-Pereira, Luiz Carlos. 2007. "Macroeconomics of Stagnation and New Developmentalism in Latin America." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.
- Darity, William Jr. 2007. "African American Reparations, Keynes, and the Transfer Problem." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.
- Forstater, Mathew, and L. Randall Wray. 2007. *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.
- Galbraith, James K. 2007. "Keynes and Globalization." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.
- Goodhart, C.A.E. 2007. "Money and Default." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.
- . 2005. "Review of Credit and State Theories of Money: The Contributions of A. Mitchell Innes." *History of Political Economy* 37(4): 759–761.
- . 1998. "Two Concepts of Money: Implications for the Analysis of Optimal Currency Areas." *European Journal of Political Economy* 14(3): 407–432.
- Harcourt, G. C. 2007. "The Structure of Post Keynesian Economics: The Core Contributions of the Pioneers." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.
- Innes, A. Mitchell. 1913. "What is Money?" *Banking Law Journal* 30(5): 377–408. Reprinted in L. Randall Wray (ed.) *Credit and State Theories of Money*. Northampton: Edward Elgar (2004).

- . 1914. “The Credit Theory of Money” *Banking Law Journal* 31(2): 151–168.
Reprinted in L. Randall Wray (ed.) *Credit and State Theories of Money*.
Northampton: Edward Elgar. (2004)
- Keynes, J.M. 1980. *The Collected Writings*, Volume XXV. London: MacMillan
- . 1973. *The Collected Writings*, Volume XIV. London: MacMillan.
- . 1964. *The General Theory of Employment, Interest, and Money*. New York
and London: Harcourt Brace Jovanovich.
- . 1930. *A Treatise on Money*, Volumes I and II (1976). New York: Harcourt,
Brace, and Company.
- . 1914. “What is Money?” review article in *Economic Journal* 24(95): 419–
421.
- Knapp, Georg Friedrich. (1924) 1973. *The State Theory of Money*. Clifton: Augustus M.
Kelley.
- Kregel, Jan. 2007. “The Continuing Policy Relevance of Keynes’s General Theory.”
forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory
after 70 Years*. Houndsmills: Palgrave Publishing.
- . 1997. “The Theory of Value, Expectations, and Chapter 17 of *The General
Theory*.” in G.C. Harcourt and P.A. Riach (eds.) *A “Second Edition” of The General
Theory*, Vol 1. London and New York: Routledge.
- . 1976. “Economic Methodology in the Face of Uncertainty: The Modeling
Methods of Keynes and the Post-Keynesians.” *The Economic Journal* 86(342): 209–
25.
- López G., Julio. 2001. “Keynes in Latin America and Latin American Keynesianism.”
forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory
after 70 Years*. Houndsmills: Palgrave Publishing.
- Marcuzzo, Maria Cristina. 2007. “Keynes and Persuasion.” forthcoming in Mathew
Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*.
Houndsmills: Palgrave Publishing.
- Minsky, Hyman P. 1986. *Stabilizing an Unstable Economy*. New Haven and London:
Yale University Press.
- . 1963. “Discussion.” *American Economic Review* 53(2): 412.

Moore, Basil. 2007. "Targeting Inflation and Full Employment in South America." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.

———. "A Global Currency for a Global Economy." *Journal of Post Keynesian Economics* 26(4): 631–653.

Skidelsky, Robert. 2007. "The Origins of Keynesian Economics and Some Applications to Restructuring and Globalization." forthcoming in Mathew Forstater and L. Randall Wray (eds.) *The General Theory after 70 Years*. Houndsmills: Palgrave Publishing.

Wray, L. Randall. 2006. "Keynes's Approach to Money: An Assessment after 70 Years." *Atlantic Economics Journal* 34(2): 183–193.

———. 2004. *Credit and State Theories of Money: The Contributions of A. Mitchell Innes*. Cheltenham, UK: Edward Elgar.

———. 1998. *Understanding Modern Money: The Key to Full Employment and Price Stability*. Cheltenham, UK: Edward Elgar.

———. 1990. *Money and Credit in Capitalist Economies: The Endogenous Money Approach*. Aldershot, UK: Edward Elgar.